

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1. through 46. are canceled.

47. (Previously Presented) A method for interpolating tiles to a rasterizer comprising:

- determining pixel coverage of a plurality of graphics primitives against one or more tiles;
- distributing said primitives to one or more pipelines, wherein each of said pipelines is granted ownership to each of said tiles that fall into a designated screen region;
- using a rasterizer in each of said pipeline to receive said primitives and perform one or more graphics processing operations on said tiles;
- using a scan converter and a Hierarchical-Z unit to perform a coarse grain tiling process on said tiles;
- computing a list of tiles in a current pipeline and covered by a current graphics primitive;
- generating a first mask value specifying which of intermediate tiles within each of said tiles on said list are visible;
- generating a sub-list containing smaller quad tiles within said intermediate tiles;
- computing a second mask value specifying which of said quad tiles are visible and a z plane equation.

48. (Previously Presented) The method of claim 47 wherein said determining uses polygon vertex data in said primitives to calculate pixel coverage.

49. (Previously Presented) The method of claim 47 wherein said determining dynamically takes into account different configurations of said plurality of graphics pipelines.

50. (Previously Presented) The method of claim 47 wherein the size of said tiles is configurable.

51. (Previously Presented) The method of claim 47 wherein the width and height of said tiles are the same.

52. (Previously Presented) The method of claim 47 wherein the number of said plurality of screen portions is 2^n .

53. (Previously Presented) The method of claim 47 wherein said tiles are of size 8x8.

54. (Previously Presented) The method of claim 47 wherein said intermediate tiles are of size 4x4.

55. (Previously Presented) The method of claim 47 wherein said quad tiles are of size 2x2.

56. (Previously Presented) The method of claim 47 wherein said ownership of said tiles is assigned to said pipelines in a non-contiguous manner.

57. (Previously Presented) A computer program product comprising:

a computer usable medium having computer readable program code embodied therein configured to interpolate tiles to a rasterizer, said computer program product comprising:

computer readable code configured to cause a computer to determine pixel coverage of a plurality of graphics primitives against one or more tiles;

computer readable code configured to cause a computer to distribute said primitives to one or more pipelines, wherein each of said pipelines is granted ownership to each of said tiles that fall into a designated screen region;

computer readable code configured to cause a computer to use a rasterizer in each of said pipeline to receive said primitives and perform one or more graphics processing operations on said tiles;

computer readable code configured to cause a computer to use a scan converter and a Hierarchical-Z unit to perform a coarse grain tiling process on said tiles;

computer readable code configured to cause a computer to compute a list of tiles in a current pipeline and covered by a current graphics primitive;

computer readable code configured to cause a computer to generate a first mask value specifying which of intermediate tiles within each of said tiles on said list are visible;

computer readable code configured to cause a computer to generate a sub-list containing smaller quad tiles within said intermediate tiles;

computer readable code configured to cause a computer to compute a second mask value specifying which of said quad tiles are visible and a z plane equation.

58. (Previously Presented) The computer program product of claim 57 wherein said computer readable code configured to cause a computer to determine uses polygon vertex data in said primitives to calculate pixel coverage.

59. (Previously Presented) The computer program product of claim 57 wherein said computer readable code configured to cause a computer to determine dynamically takes into account different configurations of said plurality of graphics pipelines.

60. (Previously Presented) The computer program product of claim 57 wherein the size of said tiles is configurable.

61. (Previously Presented) The computer program product of claim 57 wherein the width and height of said tiles are the same.

62. (Previously Presented) The computer program product of claim 57 wherein the number of said plurality of screen portions is 2^n .

63. (Previously Presented) The computer program product of claim 57 wherein said tiles are of size 8x8.

64. (Previously Presented) The computer program product of claim 57 wherein said intermediate tiles are of size 4x4.

65. (Previously Presented) The computer program product of claim 57 wherein said quad tiles are of size 2x2.

66. (Previously Presented) The computer program product of claim 57 wherein ownership of said tiles is assigned to said pipelines in a non-contagious manner.